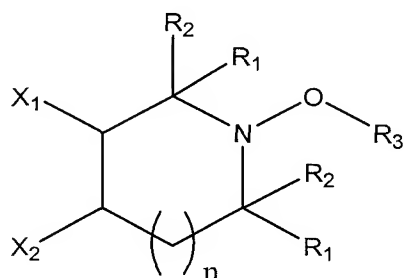


IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the preparation of a block copolymer by means of radicalic polymerization, which comprises:

a) polymerizing a vinylaromatic monomer at a temperature higher than, or equal to, 120°C, in the presence of a radicalic initiating system, consisting of a compound having general formula (I):



wherein R<sub>1</sub> and R<sub>2</sub>, the same or different, represent a methyl or ethyl radical, X<sub>1</sub> represents a hydrogen atom, X<sub>2</sub> represents a hydrogen atom or a hydroxyl, or X<sub>1</sub> and X<sub>2</sub>, the same or different, represent a C<sub>1</sub>-C<sub>4</sub> (iso)alkyl radical, or, they jointly form an aromatic ring, n is equal to zero or 1, and R<sub>3</sub> represents a radical selected from ~~one of the following groups:~~  
the group consisting of

-C(CH<sub>3</sub>)<sub>2</sub>-CN,

-C(CH<sub>3</sub>)<sub>2</sub>-Ph, [[or]] and

-CHCH<sub>3</sub>Ph;

~~or R<sub>3</sub> is absent, as in that position there is an un-coupled electron,~~ used in a mixture with radical generator compounds (G) selected from the group consisting of peroxides, peresters, percarbonates, [[or]] and azobisdialkyldinitriles, and with molar ratios I/G lower than 4;

until a conversion of the monomer ranging from 5 to 99.9% is obtained;

b) feeding to the polymerization mixture of step (a), after obtaining the desired conversion, methacrylonitrile in such a quantity that, at the end of the polymerization, the total weight of the block copolymer,  $M_w$ , is lower than 1,000,000, wherein step b) is carried out at the same operating temperature and in the presence of the same initiating system as step a); and

c) recovering, at the end of the polymerization, the block copolymer thus obtained, wherein a precipitation and/or recovery step of a first polymeric block is absent between steps a) and b).

Claim 2 (Original): The process according to claim 1, wherein the  $R_3$  group is  $-\text{C}(\text{CH}_3)_2\text{-CN}$ .

Claim 3 (Original): The process according to claim 1, wherein the  $R_3$  group is  $-\text{C}(\text{CH}_3)_2\text{-Ph}$ .

Claim 4 (Original): The process according to claim 1, wherein the  $R_3$  group is  $-\text{CHCH}_3\text{Ph}$ .

Claim 5 (Canceled).

Claim 6 (Previously Presented): The process according to claim 1, wherein the polymerization of both step (a) and step (b) is carried out at a temperature ranging from 120 to 150°C.

Claim 7 (Previously Presented): The process, according to claim 1, wherein the initiator having general formula (I) is present in concentrations ranging from 0.01 to 2% in moles with respect to the total moles of the monomers fed.

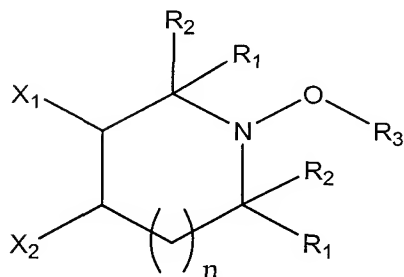
Claim 8 (Currently Amended): The process according to claim 1, wherein the ~~initiator having general formula (I) is used with free-radical~~ generators (G)[[,]] are selected from the group consisting of dibenzoyl peroxide, dicumyl peroxide, [[or]] and N,N'-azobis-(diisobutyronitrile); and with molar ratios I/G ranging from 1 to 3.

Claim 9 (Previously Presented): The process according to claim 1, wherein the polymerization of both steps (a) and (b) is carried out batchwise, in continuous or semi-continuous at a temperature higher than 120°C and at a pressure, which is such as to maintain the monomers in liquid phase.

Claims 10-12 (Canceled).

Claim 13 (Currently Amended): A process for the preparation of a block copolymer by means of radicalic polymerization, which comprises:

a) polymerizing a vinylaromatic monomer at a temperature higher than, or equal to, 120°C, in the presence of a radicalic initiating system, consisting of a compound having general formula (I):



wherein  $R_1$  and  $R_2$ , the same or different, represent a methyl or ethyl radical,  $X_1$  represents a hydrogen atom,  $X_2$  represents a hydrogen atom or a hydroxyl, or  $X_1$  and  $X_2$ , the same or different, represent a  $C_1$ - $C_4$  (iso)alkyl radical, or, they jointly form an aromatic ring,  $n$  is equal to zero or 1, and  $R_3$  represents a radical selected from ~~one of the following groups:~~  
the group consisting of

$-C(CH_3)_2-CN$ ,

$-C(CH_3)_2-Ph$ , ~~[[or]]~~ and

$-CHCH_3Ph$ ;

or  $R_3$  is absent, as in that position there is an un-coupled electron, ~~[[used]]~~ in a mixture with radical generator compounds (G) selected from the group consisting of peroxides, peresters, percarbonates, ~~[[or]]~~ and azobisdialkyldinitriles, and with molar ratios I/G lower than 4;

until a conversion of the monomer ranging from 5 to 99.9% is obtained;

b) feeding to the polymerization mixture of step (a), after obtaining the desired conversion, a monomer deriving from (meth)acrylic acid in such a quantity that, at the end of the polymerization, the total weight of the block copolymer,  $M_w$ , is lower than 1,000,000, wherein step b) is carried out at the same operating temperature and in the presence of the same initiating system as step a); and

c) recovering, at the end of the polymerization, the block copolymer thus obtained;

wherein a precipitation and/or recovery step of a first polymeric block is absent between steps a) and b), and at least one of the following conditions is satisfied in reference to formula (I):

the  $R_3$  group is  $-C(CH_3)_2-CN$ ;

the  $R_3$  group is  $-C(CH_3)_2-Ph$ ;

the  $R_3$  group is  $-CHCH_3Ph$ ;

X<sub>1</sub> and X<sub>2</sub> jointly form an aromatic ring, and n is equal to zero; and

the initiator is selected from the group consisting of

1,1,3,3-tetraethyl-2-(2-cyanoprop-2-yl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetraethyl-2-(2-phenylprop-2-yl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetraethyl-2-(2-phenylethyl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetramethyl-2-(2-cyanoprop-2-yl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetramethyl-2-(2-phenylprop-2-yl)-2,3-dihydro-1H-isoindole; [[or]] and

1,1,3,3-tetramethyl-2-(2-phenylethyl)-2,3-dihydro-1H-isoindole.

Claim 14 (Previously Presented): The process according to claim 13, wherein the R<sub>3</sub> group is -C(CH<sub>3</sub>)<sub>2</sub>-CN.

Claim 15 (Previously Presented): The process according to claim 13, wherein the R<sub>3</sub> group is -C(CH<sub>3</sub>)<sub>2</sub>-Ph.

Claim 16 (Previously Presented): The process according to claim 13, wherein the R<sub>3</sub> group is -CHCH<sub>3</sub>Ph.

Claim 17 (Previously Presented): The process according to claim 13, wherein in the radicalic initiating system, having general formula (I), X<sub>1</sub> and X<sub>2</sub> jointly form an aromatic ring, and n is equal to zero.

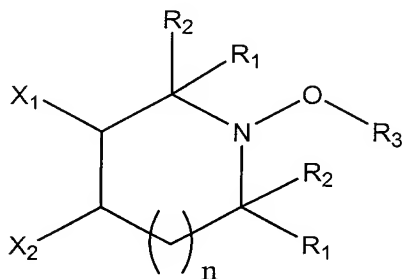
Claim 18 (Currently Amended): The process according to claim 17, wherein the initiator having general formula (I) is selected from[[:]] the group consisting of

1,1,3,3-tetraethyl-2-(2-cyanoprop-2-yl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetraethyl-2-(2-phenylprop-2-yl)-2,3-dihydro-1H-isoindole;  
1,1,3,3-tetraethyl-2-(2-phenylethyl)-2,3-dihydro-1H-isoindole;  
1,1,3,3-tetramethyl-2-(2-cyanoprop-2-yl)-2,3-dihydro-1H-isoindole;  
1,1,3,3-tetramethyl-2-(2-phenylprop-2-yl)-2,3-dihydro-1H-isoindole; [[or]] and  
1,1,3,3-tetramethyl-2-(2-phenylethyl)-2,3-dihydro-1H-isoindole.

Claim 19 (New): A process for the preparation of a block copolymer by means of radicalic polymerization, which comprises:

a) polymerizing a vinylaromatic monomer at a temperature higher than, or equal to, 120°C, in the presence of a radicalic initiating system, consisting of a compound having general formula (I):



wherein R<sub>1</sub> and R<sub>2</sub>, the same or different, represent a methyl or ethyl radical, X<sub>1</sub> and X<sub>2</sub> jointly form an aromatic ring, n is equal to zero or 1, and R<sub>3</sub> represents a radical selected from the group consisting of

-C(CH<sub>3</sub>)<sub>2</sub>-CN,  
-C(CH<sub>3</sub>)<sub>2</sub>-Ph, and  
-CHCH<sub>3</sub>Ph;

or R<sub>3</sub> is absent, as in that position there is an un-coupled electron, in a mixture with radical generator compounds (G) selected from the group consisting of peroxides, peresters, percarbonates, and azobisdialkyldinitriles, and with molar ratios I/G lower than 4;

until a conversion of the monomer ranging from 5 to 99.9% is obtained;

b) feeding to the polymerization mixture of step (a), after obtaining the desired conversion, methacrylonitrile in such a quantity that, at the end of the polymerization, the total weight of the block copolymer,  $M_w$ , is lower than 1,000,000, wherein step b) is carried out at the same operating temperature and in the presence of the same initiating system as step a); and

c) recovering, at the end of the polymerization, the block copolymer thus obtained, wherein a precipitation and/or recovery step of a first polymeric block is absent between steps a) and b).

Claim 20 (New) : The process according to claim 19, wherein  $n$  is equal to zero.

Claim 21 (New): The process according to claim 20, wherein the initiator having general formula (I) is selected from the group consisting of

1,1,3,3-tetraethyl-2-(2-cyanoprop-2-yl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetraethyl-2-(2-phenylprop-2-yl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetraethyl-2-(2-phenylethyl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetramethyl-2-(2-cyanoprop-2-yl)-2,3-dihydro-1H-isoindole;

1,1,3,3-tetramethyl-2-(2-phenylprop-2-yl)-2,3-dihydro-1H-isoindole; and

1,1,3,3-tetramethyl-2-(2-phenylethyl)-2,3-dihydro-1H-isoindole.